

Project Report

Propensity to Lifelong Learning: What Makes an Australian Lifelong Learner?

© Robert D.White

University of Southern Queensland, Toowoomba

whiter@usq.edu.au

Ph: 07 4631 5407

This report details a research project to meet the requirement of the Master of Education
(Lifelong Learning)

Statement of Authorship

I certify that the attached material is my original work. No other person's work has been used without due acknowledgement. Except where I have clearly stated that I have used some of this material elsewhere, it has not been presented by me for assessment in any other course or subject at this or any other institution .

Robert White 2nd August 2006.

Acknowledgements

I want to give first acknowledgment and thanks to my supervisor, Mark Tyler, for his professional and personal help and support. His common area of academic interest, like-mindedness, and shared sense of humour have been a great support to me during the demanding periods of this journey of exploration, and plain good fun during the periods when things were going well. Mark's humane and down-to-earth support during the period when I became partially blind cannot be overestimated, and he is an asset to the Faculty of Education.

In the same vein, I thank Associate Professors Shirley O'Neill and Pat Danaher, who went out of their way to accommodate and support me, and whose conversations and advice have helped steer my journey of exploration thus far.

David Bull must not escape mention; his interest in and willing reading of my work has added greatly to my confidence about the direction and value of my work.

I must also express my appreciation for the pivotal contribution of Dr. Neil Selwyn of the Cardiff University School of Social Sciences. Neil kindly provided me with a copy and allowed me to adapt the questionnaire used by the Adult Learning @ Home research project. His assistance greatly helped to situate and advance my research. He saved me from having to 'reinvent the wheel'.

Entering this masters program would not have been possible without the grounding in basic research skills and the opportunities to co-author which I received in the Faculty of Business and Commerce. I particularly thank Dr. Graham Jocumsen (retired), Les Brown, and Col McCosker (retired) who went out of their way to help me acquire the skills which have enabled me to complete this program.

This project of course could not have achieved anything without those people who so kindly agreed to be interviewed. Their participation is the foundation of this project and whatever contribution it makes to educational knowledge. Their interviews were a pleasure to conduct.

I cannot overstate the support of those family and close friends who propped up my morale when health and circumstance became almost overwhelming, and who cheered me on when the work and circumstance went as well as I hoped.

Finally, I want to put on record the significance of this achievement in the history of my family. So far as I know, no one in my family has obtained a postgraduate education since my forebear, Robert Charles White, mathematician and astronomer. He lived in Nottinghamshire, England, and died in 1773, three years after Captain Cook sailed up the east coast of Australia. It has been a long time coming, and I feel honoured and very satisfied to reintroduce academia to the history of my family.

Contents

Acknowledgements	2
Figures and tables	6
Introduction	8
Background to lifelong learning	9
Literature review	11
What is lifelong learning?	11
What is a lifelong learner – attributes?	13
Policy and equity	14
The world of work	16
Propensity to lifelong learning	16
Literature summary	17
Methodology	19
Data analysis	19
General discussion	23
Frequency analysis by determinant	27
Time of birth	27
Place of birth	29
Gender	31
Family background	32
Experience of initial schooling	33
Experience of work	34
Experience of adult family life	35
Summary of results	36
Summary and Recommendations	37
Summary of Findings	37
Recommendations	40
References	41
Appendix A	45
Interview Questionnaire	45

Appendix B	60
Coefficients of correlation	60
Table B1 - Personal Characteristics	60
Table B2 – Influences	61

Figures and Tables

<i>Figure 1. The Importance of Education.</i>	6
<i>Figure 2. Formal learning relative to time of birth.</i>	18
<i>Figure 3. Informal learning (a hobby or interest involving self-study or practice) relative to time of birth.</i>	19
<i>Table 1 Frequencies of Years of Birth</i>	20
<i>Table 2 Frequencies of formal learning expressed as a percentage of postsecondary years involving full and part-time formal study.</i>	21
<i>Table 3 Frequencies of informal learning expressed as a proportion of a whole lifespan.</i>	21
<i>Table 4 Frequencies of places of birth</i>	22
<i>Table 5 Frequencies of the numbers of places lived since parental home</i>	23
<i>Table 6 Frequencies of each gender</i>	23
<i>Table 7 Frequencies of the nature and extent of influence of families of origin on education and learning</i>	24

Table 8 <i>Frequencies of the nature and extent of influence of initial schooling on education and learning</i>	25
Table 9 <i>Frequencies of the nature and extent of influence of work on education and learning</i>	26
Table 10 <i>Frequencies of the nature and extent of influence of adult family life on education and learning</i>	27

Introduction

Lifelong learning has been extensively researched and has attained global prominence since the 1970s. There now exists a large body of literature on the subject and supranational institutions, such as the Organisation for Economic Cooperation and Development (OECD), the United Nations Educational, Scientific and Cultural Organisation (UNESCO), and the World Bank have and continue to influence the policies of national and intra-national governments. Lifelong learning is promoted to populations, workforces, and individuals as benefiting national and global economies and personal well-being.

Lifelong learning terminology and policy are ubiquitous. Governments and the business sector now expect individuals in general, and workers in particular, to be lifelong learners. The rationale proffered is that lifelong learning enables people to cope with an ever-changing society, economy and world of work, that is, to be good and effective citizens and workers. For that expectation and policy to be achievable, reasonable, and equitable it must be known whether it is in fact possible for everyone to be a lifelong learner. Therefore it must also be known what makes or motivates a lifelong learner (determinants). This research goes beyond lifelong learner attributes, to focus on the propensity to lifelong learning of contemporary Australians, that is, what makes an Australian lifelong learner.

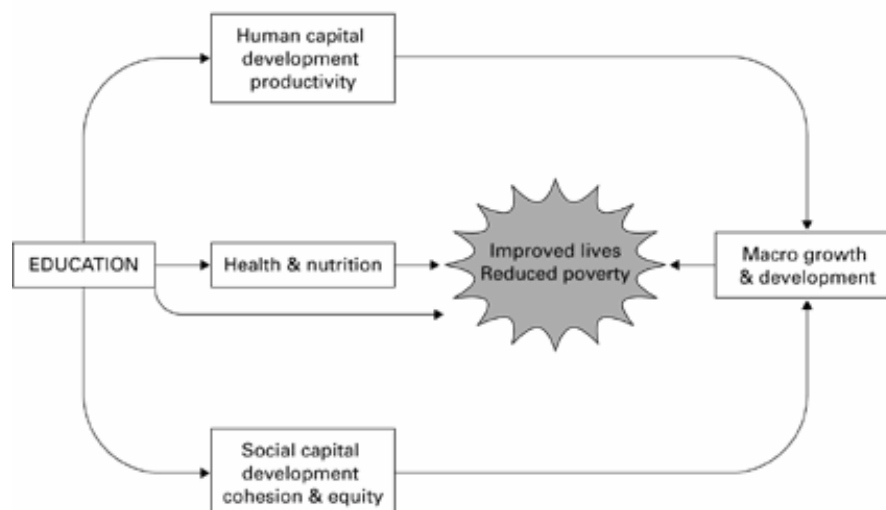
A review of literature found the Adult Learning @ Home research project in Britain, viewable at <http://www.cf.ac.uk/socsi/ict/>, is arguably the seminal work on the determinants of lifelong learning. The findings about learning trajectories add new and deeper insight into the subject and its implications for education and policy. This work was conducted by researchers Stephen Gorard, Neil Selwyn, John Furlong and Louise Madden between 2002 and 2004. It investigated lifelong learning determinants in conjunction with the use and influence of information and communication technology in and on both formal and informal learning. Some answers were found to the question 'What makes a lifelong learner' in the British context. Whilst Watson (2003) has conducted significant Australian research in this area, there is no evident Australian research comparable to the British work.

Mindful of Osborne's (2002) caution about making international comparisons, this pilot study investigates whether there is a *prima facie* case for the proposition that the British findings are, or may be, either generalisable or transferable to the Australian context. This study describes the background to lifelong learning and the literature review offers a working definition and description of attributes. It also provides an overview of policy and equity, the world of work, and propensity to lifelong learning. A positivist approach was taken to the choice of methods, and the data from a purposive sample of interviewees was quantitatively analysed. Finally, analysis informed by literature suggested that there is a *prima facie* case, and further research into determinants and implications for policy and equity is recommended.

Background to Lifelong Learning

Lifelong learning policy has become ubiquitous in developed countries. Governments and employers now expect that workforces and individuals will be, or become, lifelong learners (Murphy, 2000; Webb, 2000). Figure 1 illustrates the World Bank's (1999) description of lifelong learning's contribution to human and social capital and economic prosperity.

Figure 1. The Importance of Education



Source: World Bank Human Development Network, 1999, p. 20

Globalisation's market forces, in conjunction with social forces of individualisation, are driving the paradigm shift to lifelong learning and shaping its cultural and social context (Grace, 2002). The OECD describes the contribution "to self-fulfilment [sic], higher earnings and employment, and to innovation and productivity" (Organisation for Economic Cooperation and Development, 2004, p.2) as the rationale for global lifelong learning. It is seen as a panacea for economic and social needs and expectations (International Labour Organisation, 2000a). The World Bank (1999) describes "the lifelong learning approach that is becoming a key factor in economic growth" (p.17). In Australia

lifelong learning is portrayed as a policy that will promote economic growth. The second assumption...is that lifelong learning will promote social cohesion in a time of upheaval caused by rapid technological change (Watson, 2003, p. 7).

The extent to which such expectations are reasonable, realistic, and achievable, and the extent to which they coincide with people's wishes and inclinations, are policy considerations in a democracy such as Australia. By extension, there are implications for individual well-being, social cohesion, and economic efficiency. What a lifelong learner is and does (attributes) have been comprehensively studied. However, what causes or motivates a person to be or become a lifelong learner (determinants) have rarely been studied. They appear to have been described only in the British context and the findings are not broadly known internationally. Going beyond attributes and understanding determinants can assist understanding of propensity to lifelong learning. It will then be possible to critique lifelong learning and educational equity policy and form a prognosis for the future of lifelong learning. Whilst it is not within the scope of this study to enter into the "nature versus nurture" debate in relation to propensity to learning generally, this report acknowledges the relevant British findings in later discussion.

Literature Review

The lifelong learning literature was reviewed by posing three questions: ‘What is lifelong learning?’, ‘What are lifelong learner attributes?’, and ‘What makes a lifelong learner?’, or ‘What are the determinants of propensity to lifelong learning?’ There is an extensive body of lifelong learning literature, a smaller, but still sizable, body of literature about lifelong learner attributes, but little literature specifically about determinants of lifelong learning. Each is commensurate with the amount of research attention received since the 1970s, and each was overviewed and definitions settled upon for the purpose of this research. It is the gap in research and literature about determinants of lifelong learning which this study explores.

What is Lifelong Learning?

The term “lifelong learning” is ubiquitous in education, and meanings vary. Jenkins, Vignoles, Wolf & Galinda-Rueda (2002) found that “measuring the extent of participation in lifelong learning is very sensitive to the definition of lifelong learning adopted” (p.3). Some definitions include both formal and informal learning whilst others include only formal and vocational learning. The literature “spans a wide range of education and training issues, and speaks to many different audiences” (Watson, 2003, p.2). The literature suggests audiences influence the purpose of the research and hence the definition. McKenzie (1998) broadly described lifelong learning as “an all-embracing concept that encompasses personal, social and economic objectives, and national policy debates generally reflect the multiple dimensions involved” (p.1). The OECD (2004) states that “lifelong learning...encompasses all learning endeavours over the lifespan” (p.1).

The concept has existed since the early 1900s, with terminology changing over time. In 1919 the British Ministry of Reconstruction said

(A)dult education must not be regarded as a luxury for a few exceptional persons here and there, not as a thing which concerns a short span of early manhood, but that adult education is a permanent national necessity, an inseparable aspect of citizenship, and therefore should be both universal and lifelong (Faris, 2004, p.4).

In 1963 Alan Thomas argued that

We therefore offer as our central concern, not education, in its formal and institutional sense, but learning... the ability of human beings to learn continuously, and the conditions under which learning best takes place. These conditions are the foundations of the learning society (Faris, 2004, p.5).

In her report to the Australian Government, Watson (2003) quoted The European Lifelong Learning Initiative's "perhaps rather ambitious" (p.3) definition:

Lifelong learning is a continuously supportive process which stimulates and empowers individuals to acquire all the knowledge, values, skills and understanding they will require throughout their lifetimes and to apply them with confidence, creativity and enjoyment in all roles, circumstances, and environments. (pp. 3-4)

She further encapsulated the concept in stating that "Lifelong learners must have the *motivation* and *capacity* to learn, in any type of setting, with any type of teacher, or simply by themselves [emphasis in the original]" (p. 3).

Terminology has evolved but the conceptual similarity over time is evident. The concept is characterized by the inclusion of all forms of learning in all contexts, the occurrence of learning over the whole lifespan, learning for personal, social, and economic purposes, and universality of learning. Gallagher (2001) observed that "people generally valued formal and informal learning" (section 3, ¶ 5). For the purpose of this study formal learning relates to recognised educational institutions and other structured learning environments such as off the job training. Informal learning relates to either structured or unstructured learning relating to long term hobbies or interests. Non-formal learning is unstructured learning which occurs in everyday life. In light of this, and for the purpose of this study, the following working definition of lifelong learning is offered: *all formal and informal learning, but excluding non-formal learning, over the whole lifespan.*

What is a Lifelong Learner - Attributes?

Despite varying definitions, literature and policy generally agree on lifelong learner attributes. The OECD (2004) describes them as emphasising “creativity, initiative and responsiveness” (p.2). In referring to the Candy report (National Board for Employment, Education and Training, 1994), Laver (1996) defined lifelong learner attributes as including

- an enquiring mind;
- the ability to see the interconnectedness of sectors and fields;
- the ability to ask relevant questions and critically evaluate information; and
- A number of personal attributes (p.6).

The Australian Council of Deans of Education (Kalantzis, 2003,) has described lifelong learner attributes in essentially the same way as the Queensland Schools Curriculum Council (2002), which states

“A lifelong learner is:

- a knowledgeable person with deep understanding*
- a complex thinker*
- a creative person*
- an active investigator*
- an effective communicator*
- a participant in an interdependent world*
- a reflective and self-directed learner”* (p. 4 [emphasis in the original]).

For the purpose of this study, lifelong learner attributes are taken to include *those of a person who is knowledgeable and creative, thinks complexly and communicates effectively; a person who actively investigates, and participates in an interdependent world in which they direct their own reflective learning.*

Policy and Equity

The International Labour Organisation (2000b) has reported that

Lifelong learning is now the guiding principle for policy strategies concerned with objectives ranging from a nation's economic well-being and competitiveness to personal fulfillment and social cohesion. It is widely assumed to be essential for everyone and therefore has to be made available to all. (section 1, ¶ 2)

The OECD (2004) has stated that “The “lifelong learning for all” target is an ambitious one that can only be achieved progressively over the long term”, and further describes the “...psychological and economic incentive for participation in learning activities” (p.1, ¶ 3). This is the rationale by which governments justify their lifelong learning policy. Watson (2003) has contextualised the Australian policy expectation of universal participation in lifelong learning to meet economic demands.

Bryce, Frigo, McKenzie & Wither (2000) compared the relationship of lifelong learning to educational policy and planning in Australia and Japan. Australia emphasises lifelong learning for skills training, employability and the economy; Japan emphasises it for citizenship and quality of life. Hopkins and Maglan (1998) reflected the growing Australian policy view of moving responsibility for ongoing learning onto people themselves. In a public speech the Queensland Director General of Education stated that “the central purpose of schooling in Queensland should be to create...reflective Australian citizens with a disposition to lifelong learning” (Moran, 2000, ¶ 24). A policy disposition towards lifelong learning is evident from supranational to state government levels. Australian policy and decision makers tend to focus their rationale more on economic and employment needs and to expect universal participation. Therefore, in light of King's (2004) research, the equity of that expectation is addressed in this study.

Career self-management expectations suggest Parker's (2003) locus of control research may also have implications for propensity to lifelong learning. The greater self-motivation and aptitude to non-traditional delivery modes of people who exhibit internal locus of control is consistent with lifelong learner attributes. However, Gorard and Selwyn (2005) claim that “the vast majority of

variation in patterns of participation that can be explained is explained by variables that we could have known when each person was born” (p.1205). Their discussion of learning trajectories also indicates that whilst trajectories are predictable they are not set for life. They also found that over a third of the adult British population do not participate in any postcompulsory learning, and that the usual barriers to access were not the explanation. This suggests that conventional British educational access and equity policy may not be as effective as traditionally believed, arguably suggesting the same possibility in Australia.

Brookfield (2000) has discussed the role of adult cognition in lifelong learning, focusing on the capacities of dialectic thinking, practical logic, knowing how we know what we know, and critical reflection. He stated that “while these forms of learning are discernable at earlier stages of life, it is in adulthood that they stand out in particularly sharp relief” (p.2). In contrast, Gallagher (2001) observed that in Australia “about a quarter of the community say nothing could get them to learn” (section 3, ¶ 6). This is arguably a concern in light of McKenzie’s (1998) observation that “Those who are not able to anticipate and adapt to change – to continue learning – are likely to become increasingly marginalised in economic and social life” (Introduction section). Watson (2003) concurred, describing “a widening socio-economic gap between people who participate in education and training and those who do not” (Conclusion section, para.3).

Considering Brookfield’s (2000) developmental views in the light of Gorard and Selwyn’s (2005) findings and Gallagher’s (2001) statement, it is important to ask whether everyone can be lifelong learners, and it is relevant to consider whether propensity to lifelong learning is the fruit of nature or nurture, or both. It is fundamental to the equity of lifelong learning policy that the answers to these questions be known, and the literature indicates that, with the exception of Britain, the questions are not being asked. In comparison, McKenzie (2000) has described the lifelong learning framework now shaping higher education and developing training culture. Watson (2003) has concurred, observing that “Australian workers regularly upgrade their skills through continuing participation in education and training” (Conclusion section, ¶ 2). Supranationally, OECD Education Ministers recognise the necessity of a suite of lifelong learning policies, including “social, labour market, economic and communications policies” (OECD, 1997, Introduction section, ¶ 3).

The World of Work

Watson (2003) summarised that “the lifelong learning policy agenda is built on assumptions about the importance of skills in the new economy due to productivity growth from new technology; increased demand for skilled workers; and globalization” (p.22). One may accept that the world of work is characterised by relentless change and societies are characterised by increasingly healthy and long-lived populations. Historical notions of work, careers, and the individuals’ identity and role in work and society are changing, and workers must now take primary responsibility for their career. Although policy and decision makers expect people to be lifelong learners, responsibility is increasingly being moved away from them and employers and onto workers.

King (2004) has described “the *process* of career self-management as a control-seeking response” (section 6, ¶ 4), and describes self-efficacy, desire for control, and career anchors as determinants of career self-management, stating that “some will be more confident in their abilities to engage in these control-seeking behaviours than others” (section 6, ¶ 5). This links to the issue of locus of control in the earlier discussion of lifelong learning determinants. King (2004) points out that “career outcomes are a product of the social structure in which people operate...career options and choices are limited by contextually defined opportunities...but individuals...negotiate their own position within these constraints” (section 6, ¶ 9).

Propensity to Lifelong Learning

Compared to the body of literature about propensity to learning generally, there is very little about propensity to lifelong learning specifically, and there is little research about whether they are the same. It is arguably of concern that “the determinants of participation are so widely misunderstood.” (Gorard & Selwyn, 2003, Background section, ¶ 1). Laver (1998) made a similar observation about the Australian context: “Some of the causal connections between students and lifelong learning are not easily understood” (p.5). In relation to both lifelong learning *per se* and the financing of lifelong learning, the OECD (2004) has observed that “There is still much to learn in regard to what might work under what circumstances” (p.60). The British

work of Jenkins, Vignoles, Wolf and Galindo-Rueda (2002) also noted that, despite the policy importance of lifelong learning, "there is very little hard evidence on a) the extent of lifelong learning, b) who undertakes lifelong learning and why, and c) the benefits of lifelong learning" (p.1).

In the British context, Gorard and Selwyn (2005) found the key social determinants to be time (of birth), place (of birth), gender, family (influence) and initial schooling (influence). They elaborated that experience of initial schooling is the key influence of postcompulsory learning; experience of work and adult family life are the key influences of later-life learning. As mentioned earlier, it is not within the scope of this study to enter into the "nature versus nurture" debate in relation to propensity to learning generally nor lifelong learning particularly. The role and significance of these determinants are simply acknowledged and accepted for the purpose of study within the parameters of this project. However, it may be profitable in future research to explore the determinants in relation to the "nature versus nurture" debate. Finally, no literature was found which described determinants of lifelong learning in the Australian context.

Literature Summary

Lifelong learning literature is extensive; there is less, but still comprehensive, literature about lifelong learner attributes; there is very little literature on lifelong learning determinants. Definitions are varied and subject to the contexts of their use. For the purpose of this study, lifelong learning encompasses both formal and informal learning but excludes non-formal learning. A lifelong learner is a person who is knowledgeable with deep understanding, complex thinking and creativity, who actively investigates and effectively communicates, is interdependent with their world, and is a reflective and self-directed learner. Policy is ubiquitous, presumes the efficacy of lifelong learning, expects all to be lifelong learners, and advocates the availability of learning to all. Society and the world of work are changing inexorably and rapidly. Government and business are moving responsibility for individuals' and workers' welfare back to workers themselves (Lansbury, 2003). This is compelling people to manage their own lives generally and their careers in particular, making lifelong learning increasingly necessary. However, the determinants of propensity to lifelong learning have received little attention and

appear widely misunderstood. Apparently seminal work by the Learning @ Home Project (Gorard & Selwyn, 2005) in Britain has found some answers to the question of what makes a British lifelong learner. Earlier British work by the Centre for the Economics of Education (Jenkins, Vignoles, Wolf, & Galinda-Rueda, 2002) made similar though less extensive findings. There is a small body of literature suggesting that the determinants identified in Britain have been identified in Canadian and American populations, but these are subject to variation in definitions. The literature gives no indication of the determinants of propensity to lifelong learning among Australians.

Methodology

As a pilot study for further research, ten apparent lifelong learners were selected and two topic sub-questions developed. The project topic asks “What makes an Australian lifelong learner?” Following from that it is asked firstly “Are the selected cases in fact lifelong learners, according to the definition offered for the purpose of this study?”; secondly “Do they exhibit, at least *prima facie*, the lifelong learning determinants identified in the British research?” (Gorard & Selwyn, 2005).

A positivist approach is taken to the project’s epistemology (*how* can I know the determinants/influences of Australian lifelong learning). As Neuman (2000) stated “reality may be difficult to pin down, but it does exist” (p.67). Positivism does not regard people as robots, but does regard them as knowable. It is “an *organised method for combining deductive logic with precise empirical observations of individual behaviour* (emphasis in original)” (Neuman, 2000, p.66). It is not the purpose of this study to prove causation but rather to explore the possibility of a *prima facie* case. Therefore, positivism’s “knowledge of observable reality” (Neuman, 2000, p.69) fits well with the purposefully selected sample of people who have experienced the phenomenon under study. In this light, this project attempted to deductively answer the topic’s main and sub-questions by qualitatively analysing relevant literature (secondary data), and quantitatively analysing ten semi-structured interviews (primary data). Grounding the interview data in the lifelong learning literature helped establish what is already known, suggest what is not known, and accommodate the “descriptive value” (Wiersma & Jurs, 2005, p.14) of the research.

Appropriate methods were determined by the exploratory nature of the research question, the paucity of specific research, and the logistic impracticality (within the constraints of this study) of representatively sampling the Australian lifelong learner population. It was appropriate to select the sample “because of their characteristics relative to the phenomenon under study” (Wiersma & Jurs, 2005, p.203; p.312) and explore issues with people who have directly experienced the phenomenon in question. This increased the likelihood of obtaining useful and informative findings. Consequently a semi-structured interview instrument was developed, adapting the Adult Learning @ Home instrument by permission, thereby maximising the balance

between the specificity of the selected-response format and the data richness of the open-ended format. It also accommodates “A variety of item formats...in the same interview, and the interviewer has control over switching formats so there should be no confusion” (Wiersma & Jurs, 2005, p.187).

On that basis, an approach was chosen which was grounded in literature and involved quantitative analysis of semi-structured interviews from a purposeful sample of apparent lifelong learners. Primary data was obtained interactively from interviewees. Secondary data was obtained non-interactively from literature and includes both primary and secondary sources (predominantly the former). Primary sources are those which are “written by the people who conducted the research”; “the authors of a secondary source did not do the research” (Wiersma & Jurs, 2005, p.72). To enhance internal validity in such a small sample, the primary (interview) and secondary (literature) data were triangulated with reviews of this report by two academics. Their specialisations are educational access and equity, and further education and training. This triangulation essentially enabled “qualitative cross-validation” (Wiersma & Jurs, 2005, p.256) across different data sources, seeking corroboration of information by comparison and convergence on findings. This was necessary for two reasons. Firstly, a quite small number of cases (ten) were selected on the basis that they were assessed as exhibiting two lifelong learner characteristics. One characteristic is that each case has performed two or more different types of work during their working life; the second is that each case has engaged in formal and/or informal postcompulsory study or practice. Being considered to be typical lifelong learners, the cases were selected purposefully, that is, selection was based on “their characteristics relative to the phenomenon under study” (Wiersma & Jurs, 2005, p.203). They could not, therefore, be unquestionably expected to produce statistics representative of the whole Australian lifelong learner population. They could, however, produce statistics descriptive of their experience of lifelong learning in the Australian context. Secondly, triangulation was appropriate because this pilot study approaches the question from the opposite direction to the British study. Gorard and Selwyn (2005) representatively sampled the general population and identified lifelong learners and determinants. This study started with a sample of apparent lifelong learners, analysed their characteristics, and then compared them with the British findings.

Very little literature was found specific to determinants/influences of propensity to lifelong learning, other than the work of Gorard and Selwyn (2005). Their apparently seminal findings, involving an initial 1101 semi-structured interviews, suggest a *prima facie* generalisability or transferability to other populations, bearing in mind Osborne's (2002) caution about such comparisons. Watson's (2003) report indicated no evident comparable Australian research. Analysis of the literature indicated a suitable approach to development of this project's instrument was adaptation of the Adult Learning @ Home instrument. Dr. Neil Selwyn provided a hard-copy of the instrument and gave permission for its adaptation in this project. The instrument was designed to begin a process of identifying the motives and contexts of Australian lifelong learners. It attempted to lead to either an answer to the research question, thereby demonstrating transferability of the British findings, or to a *prima facie* case warranting further research.

Primary data (interview responses) was collected verbally (interactively) and entered into an SPSS (Statistical Package for the Social Sciences) electronic data file. The semi-structured instrument provided for open-ended responses which could potentially increase the data available for analysis. Data codes were developed progressively, originating from the instrument and further developing as data converged. Secondary data was collected in either hard or electronic copy (non-interactively) and was entered into an Endnote electronic data file for referencing.

The Adult Learning @ Home precedent (Gorard & Selwyn, 2003) also suggested that it could be worthwhile to attempt to generalise. It also demonstrated that quantitative output from case studies is not only possible but also practical. The unit of analysis in this project was the determinants of lifelong learning. Given the complexity of the world in which each person is situated and the multiple determinants found by Gorard and Selwyn, it was anticipated that the unit of analysis in this instance would be multiple determinants, and therefore this study can be classified as an embedded case study design.

The interview instrument (Appendix A) in conjunction with the selection criteria for interviewees previously described, and the specificity of the topic question and sub-questions,

enables replicability. In turn, this reliability can provide a foundation for further research, moving from this pilot study to a potentially conclusive study.

Data Analysis

General Discussion

The small sample size provided for only a simple statistical analysis. Despite this, the analysis suggested a reasonably detailed picture of a *prima facie* case that the British findings may be transferable to the Australian context.

Small sample quantitative analyses are inherently problematic. The usefulness of measures of central tendency is directly related to sample size; “the larger the sample size, n , the greater the tendency for the possible [sample mean]-values to cluster closely around the population mean μ ,” (Weiss, 1989, p.273). Kelly (2004) cautions about the teasing apart of complex interactions, and the search for causal attributions when using multiple dependent variables. He also cautions against the substitution of rich descriptions for experimental controls in the pursuit of generalisability. With those cautions in mind, the cases were purposefully selected for anticipated data richness and the primary data was analysed relative to two dependent variables. Generalisation cannot be proposed on a probability basis in this study and must be therefore be argued from a logical basis (Wiersma & Jurs, 2005).

However, for the purpose of establishing the limits of the statistical contribution to this analysis, frequencies, correlations, and regression analyses were calculated using SPSS. The lifelong learning determinants identified in the British findings (Gorard & Selwyn, 2005) were adopted as the independent variables and measured in relation to two dependant variables which are the measures of lifelong learning adopted for the purpose of this study. They are:

1. the percentage of each case’s postsecondary years which involved formal education and/or training (Table 2), either full-time or part-time, and
2. the proportion of each case’s life which involved informal learning, that is, an activity involving self-study or practice (Table 3).

For dependent variable 1, the number of years reported as involving full or part-time formal study was converted to a percentage of the number of years since the person left secondary

school. For dependent variable 2, the proportion of the person's life involving an informal learning activity was coded as either lifelong (1), pre-adult life (2), whole of adult life (3), minority of adult life (4), majority of adult life (5), or not applicable (20). The independent variables include:

- time born,
- place born,
- gender, and
- family of origin.

Additionally, in Britain, “experience of initial schooling” (Gorard & Selwyn, 2005) was found to be the key indicator of continuous postcompulsory learning; “experience of work” and “experience of adult family life” were found to be key indicators of later-life learning. These are also included in independent variables.

Firstly, frequencies for each variable were tabulated and analysed, appearing to suggest *prima facie* that the cases exhibit tendencies to be positively influenced by the same factors found to be determinants of lifelong learning in Britain. Whilst frequencies are not conclusive in their own right, in this instance they are favourably suggestive. The scatter plot and line and curve estimations for year of birth relative to formal learning (Figure 2 [Y axis = percent of postsecondary life involving formal study]) showed a noticeable difference in the patterns of cases relating to people born before 1950 and people born after 1950 (Figure 2). The plots for the pre 1950 cohort in Figure 2 were widely dispersed around the mean, demonstrating no statistically significant correlation. By comparison, the plots for the post 1950 cohort were much more narrowly dispersed around the mean.

A similar difference between the pre 1950 and post 1950 cohort appeared in the graph relating to informal learning and time of birth (Figure 3). In this figure the Y axis points are:

1. Lifelong involvement
2. Pre-adult life involvement
3. All of adult life involvement
4. Minority of adult life involvement
5. Majority of adult life involvement.

Figure 2.

Formal learning (% of postcompulsory time involving formal study) relative to time of birth

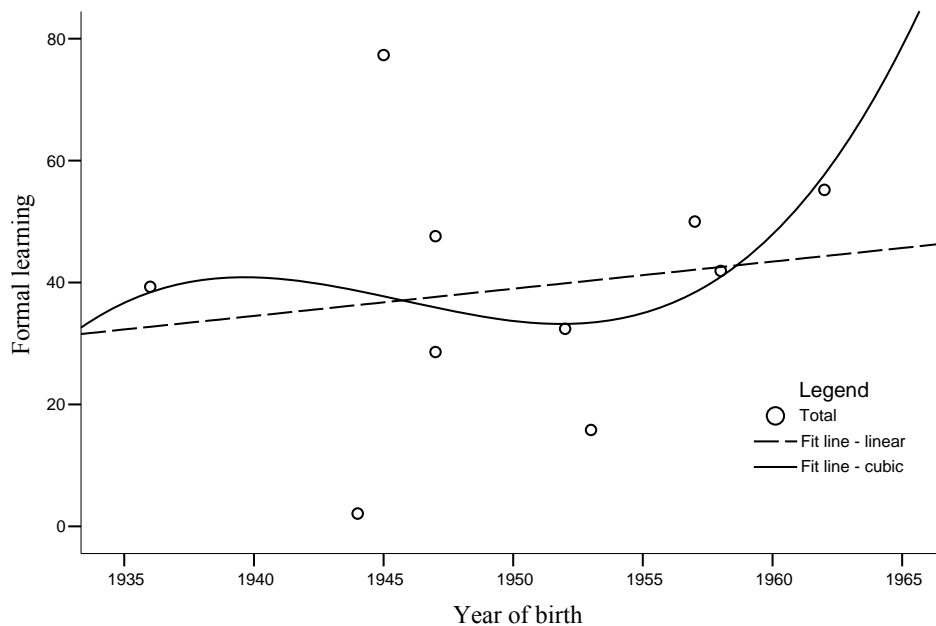
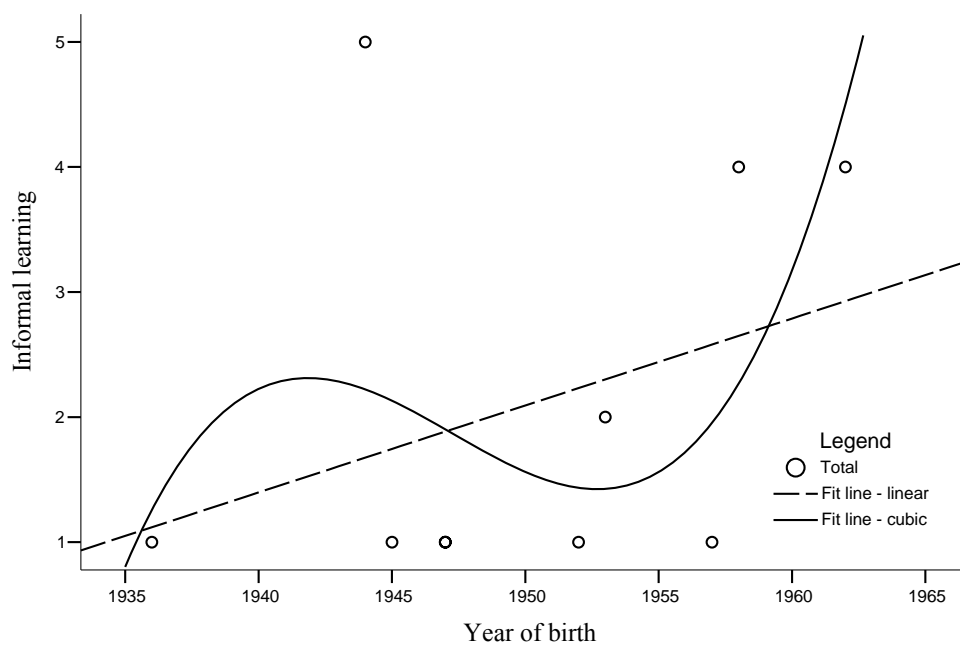


Figure 3.

Informal learning (portion of life involving a hobby or interest) relative to time of birth



The gradient of each fit line in each graph cannot be directly compared because each Y axis represents different units of measure. Also, the shape of the fit lines is of very little significance; the significance of the figures is the pattern of dispersion of the plots. The general patterns invited further examination; therefore the frequencies were analysed based on comparison of the aggregate, pre 1950, and post 1950 cohorts.

Coefficients of correlation (Appendix B) were of little value, other than to confirm that there is nothing to be gained by quantitatively analysing this small sample to that extent. Whilst -1.0 and +1.0 represent perfect divergent and convergent correlation respectively, and zero represents no correlation at all, the values in Appendix B show that almost no variables analysed in this sample covary within 0.05 probability; that is, there is at least 95% probability that any covariance was attributable to chance. The few positive coefficients which arose were negligible to modest, and some were negative to the same extent. Most coefficients were of no statistical use. Therefore those coefficients which were identified as statistically significant must be viewed sceptically. The table in Appendix B is included only to illustrate these points. Analysis of a larger sample of the same variables may corroborate the significant correlations in this analysis, but no meaning can safely be attached to them for the purpose of this study.

The frequencies of the variables offer a much more informative contribution and suggest a stronger relationship than is indicated by the coefficients of correlation. For example, family of origin was found to be a significant influence on transitional and early adult life learning in Britain. Half of interviewees in this study described the influence of their family of origin on their education and learning as positive; 40 percent described it as neither positive nor negative, and only ten percent described it as negative. This contrasts with the coefficient of correlation, which was calculated as -0.178, a very small, and statistically non-significant, negative correlation between family of origin influence and the aggregate number of postcompulsory years of study. This pattern is typical of the disjoint between the correlations and the frequencies.

Frequency Analysis by Determinant

In this section the frequencies of the lifelong learning determinants under examination are tabled and analysed. Time and place of birth, gender, family background, experience of initial schooling, of work and of adult family life are discussed in the order in which they occur over the lifespan.

Time of Birth

Tables 1, 2 and 3 show Frequencies of Years of Birth, Frequencies of formal learning expressed as a percentage of postsecondary years involving full and part-time formal study, and Frequencies of formal learning expressed as a percentage of postsecondary years involving full and part-time formal study respectively. They are discussed in relation to Time of Birth.

Table 1

Frequencies of Years of Birth

Year of birth	Aggregate		Pre 1950		Post 1950	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
1936	1	10	1	10		
1944	1	10	1	10		
1945	1	10	1	10		
1947	2	20	2	20		
1952	1	10			1	10
1953	1	10			1	10
1957	1	10			1	10
1958	1	10			1	10
1962	1	10			1	10
Total	10	100	5	50	5	50

Table 2

Frequencies of formal learning expressed as a percentage of postsecondary years involving full and part-time formal study.

Formal learning	Aggregate		Pre 1950		Post 1950	
% (rounded to nearest whole number)	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
2	1	10	1	10		
16	1	10			1	10
29	1	10	1	10		
32	1	10			1	10
39	1	10	1	10		
42	1	10			1	10
48	1	10	1	10		
50	1	10			1	10
55	1	10			1	10
77	1	10	1	10		
Total	10	100	5	50	5	50

Table 3

Frequencies of informal learning expressed as a proportion of a whole lifespan.

Informal learning	Aggregate		Pre 1950		Post 1950	
Proportion of lifespan	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Lifelong	7	70	4	40	3	30
Minority of adult life	2	20			2	20
Not applicable	1	10	1	10		
Total	10	100	5	50	5	50

Table 1 shows that the years of birth ranged from 1936 to 1962; half were before 1950 and half after 1950. Table 2 shows that for the percentage of postsecondary years involving formal study, there was a significant gap between the least two (2 and 16) and the greatest (77) figures in the range and the remaining frequencies, which are more closely positioned relative to each other. These were the variables which produced an observable pre 1950 and post 1950 difference on

the scatter plot (Figure 2). In the frequencies a similar difference was evident and a possible explanation is suggested. Both lower and upper extremes of the aggregate range, and the observable gap between the extremes and the rest of the range, fall within the pre-1950 cohort. This invites further investigation in a future study.

Table 3 shows that in relation to informal learning (proportion of whole life involving a hobby or long-term interest) 70% of aggregate frequencies indicated a lifelong activity. This was comprised of 80% of pre 1950 cases and 60% of post 1950 cases. Although it is unsafe to generalise from these observations, three things can be said about these cases. Firstly, there is a disjoint in the extent of postsecondary formal learning between cases born before 1950 and those born after 1950. Secondly, the aggregate cohort has participated in formal learning for approximately $\frac{1}{3}$ to $\frac{1}{2}$ of their postsecondary years. Thirdly, a sizable majority of cases have also participated in informal lifelong learning. For these cases the frequencies appear consistent with the British finding that time of birth influences lifelong learning.

Place of Birth

Table 4

Frequencies of places of birth

	Aggregate		Pre 1950		Post 1950	
Place of birth	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
This neighbourhood	1	10			1	10
This district or local authority area	2	20	1	10	1	10
Elsewhere in Queensland	5	50	3	30	2	20
Elsewhere in Australia	2	20	1	10	1	10
Total	10	100	5	50	5	50

The categories for place of birth and places lived since parental home are:

- This neighbourhood (Toowoomba)

- This district or local authority area (The Darling Downs or Lockyer Valley)
- Elsewhere in Queensland
- Elsewhere in Australia
- Outside of Australia.

Table 4 shows that of the aggregate cases 30% were born in ‘this neighbourhood’ and ‘this district’ combined, 50% were born ‘elsewhere in Queensland’, and 20% were born ‘elsewhere in Australia’. The highest frequencies for the pre 1950 and post 1950 cohorts were similar to the aggregate. This suggests little by itself, until compared with mobility frequencies, that is, the number of places lived since leaving their parental home.

Table 5

Frequencies of the numbers of places lived since parental home

	Aggregate		Pre 1950		Post 1950	
Number of places	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Two	1	10			1	10
Four	1	10			1	10
More than four	8	80	5	50	3	10
Total	10	100	5	50	5	50

In Table 5 the number of places each person has lived since their parental home is categorised as either “one”, “two”, “three”, “four”, or “more than four”. Of the aggregate cohort, 80% have lived in more than four places since leaving their parental home; 100% of the pre-1950 cohort and 60% of the post 1950 cohort have lived in more than four places. Overall, the place of birth and mobility frequencies show that a majority of cases were born within Queensland and have lived in more than four different places since leaving their parental home. Although not conclusive, it suggests the possibility that mobility may be indicative of propensity to lifelong learning. Further research is needed to situate these possible determinants in Australian demographic data. However, it can be argued that, in conjunction with the mobility data, data relating to place suggests consistency with the British finding; that is, lifelong learners tend to be more mobile than the rest of the population.

Gender

Table 6

Frequencies of each gender

	Aggregate		Pre 1950		Post 1950	
Gender	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Male	6	60	3	30	3	30
Female	4	40	2	20	2	20
Total	10	100	5	50	5	50

Of the aggregate cohort in Table 6, 60% are male and 40% are female, and these ratios are identical in both the pre 1950 and post 1950 cohorts. Relative to the Toowoomba district population, the sample is skewed towards males. As at the 2001 Australian Census, males and females accounted for 47.5% and 52.5% of the Toowoomba district population respectively (Australian Bureau of Statistics, 2002). This is an inadvertent consequence of the purposeful sampling. Given this degree of sample variance from population percentages and the sample size, it is unsafe to attempt to draw any conclusions from these cases' gender data in relation to lifelong learning.

Family Background.

Table 7

Frequencies of the nature and extent of influence of families of origin on education and learning

Family of origin	Aggregate		Pre 1950		Post 1950	
Nature of influence	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Positive	5	50	3	30	2	20
Negative	1	10			1	10
Neither	4	40	2	20	2	20
Total	10	100	5	50	5	50
Extent of influence						
Greatly	4	40	2	20	2	20
Moderately	2	20	1	10	1	10
A little	2	20			2	20
Not at all	2	20	2	20		
Total	10	100	5	50	5	50

Although extensive data relating to family of origin was collected, in view of the constraints of this report analysis is confined to data about the nature and extent of family of origin influence on education and learning. Table 7 shows that of the aggregate cohort 50% described their family of origin as a positive influence, 40% described it as a negative influence, and 10% described it as neither positive nor negative. The pre-1950 cohort tended to be more definite and approximately evenly divided in their view, whilst the post 1950 cohort more closely resembled the aggregate responses. Of the aggregate responses, 60% were evenly spread over the three degrees of extent of influence, that is, ‘not at all’, ‘a little’, and ‘moderately’; 40% said that their family of origin had greatly influenced their education and learning. Another perspective is that 60% described their family of origin as influencing them moderately or greatly. These responses suggest that family of origin was, on balance, a positive and significant influence on the education and learning of these cases. This suggests consistency with the British finding that family background is a determinant of lifelong learning.

Experience of Initial Schooling

Table 8

Frequencies of the nature and extent of influence of initial schooling on education and learning

	Aggregate		Pre 1950		Post 1950	
Experience of formal schooling at the time	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Very Positive	2	20	1	10	1	10
Positive	7	70	3	30	4	40
Undecided	1	10	1	10		
Total	10	100	5	50	5	50
Experience of formal schooling on reflection						
Very positive	3	30	1	10	2	20
Positive	5	50	3	30	2	20
Undecided	1	10			1	10
Negative	1	10	1	10		
Total	10	100	5	50	5	50
<u>Experience of initial schooling</u>						
Nature of influence						
Positive	7	70	3	30	4	40
Negative	1	10	1	20		
Neither	2	20	1	20	1	10
Total	10	100	5	50	5	50
Extent of influence						
Greatly	2	20	1	10	1	10
Moderately	2	20	1	10	1	10
A little	4	40	2	20	2	10
Undecided	1	10			1	10
Not at all	1	10	1	10		
Total	10	100	5	50	5	50

For the purpose of this study, the British meaning of initial schooling was accepted, that is, schooling up to the end of secondary school. Interviewees were asked about their initial schooling in two ways. Firstly they were asked to rate their view of their experience of formal schooling *at the time* and *on reflection*. Secondly they were asked to describe whether their

experience of initial schooling was positive or negative and to what extent it influenced their education and learning.

Table 8 of the aggregate cohort 70% described their *view* of formal schooling *at the time* as positive and a further 20% described it as very positive. The pre 1950 and post 1950 cohorts were similar with the post 1950 cohort slightly more definite. Of the aggregate cohort, 50% described their *view on reflection* as positive and 30% described it as very positive. The pre 1950 and post 1950 cohorts were similar. Regarding their experience of initial schooling, 70% of the aggregate cohort described it as positive, with pre 1950 and post 1950 cohorts similar. When asked about the extent to which their experience of initial schooling influenced their education and learning, responses were more varied. Of the aggregate cohort, 20% said “greatly”, 20% said “moderately”, and 40% said “a little”. The remaining 20% were undecided or said “not at all”.

Overall, the frequency data suggests that experience of initial schooling is an indicator of continuous post-compulsory learning in these cases. This is consistent with the British finding and invites further research.

Experience of Work

Table 9

Frequencies of the nature and extent of influence of work on education and learning

Work	Aggregate		Pre 1950		Post 1950	
Nature of influence	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Positive	10	100	5	50	5	50
Total	10	100	5	50	5	50
Extent of influence						
Greatly	8	80	5	50	3	30
Moderately	2	20			2	20
Total	10	100	5	50	5	50

Interviewees were asked whether their experience of work was a positive or negative influence on their education and learning and to what extent. Table 9 shows that, without exception, all respondents described their experience of work as a positive influence. Of the aggregate cohort, 80% said it influenced their learning greatly and 20% said it influenced their learning moderately. All of the pre 1950 cohort said it influenced their learning greatly, whilst the post 1950 cohort were approximately evenly divided between “greatly” and “moderately”.

In these cases, the data strongly suggests that experience of work is an indicator of later-life learning. At this level of analysis, there appears to be consistency with the British finding, inviting further research.

Experience of Adult Family Life

Table 10

Frequencies of the nature and extent of influence of adult family life on education and learning

Adult experience of family life	Aggregate		Pre 1950		Post 1950	
Nature of influence	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Positive	7	70	4	40	3	30
Negative	1	10			1	10
Neither	2	20	1	10	1	10
Total	10	100	5	50	5	50
Extent of influence						
Greatly	2	20	1	10	1	10
Moderately	5	50	3	30	2	20
A little	1	10			1	10
Not at all	2	20	1	10	1	10
Total	10	100	5	50	5	50

Interviewees were asked whether their experience of adult family life was a positive or negative influence on their education and learning and to what extent. Table 10 shows that of the aggregate cohort 70% described their experience of adult family life as a positive influence on their learning; 10% described it as a negative influence, and 20% described it as neither a

positive nor a negative influence. The pre 1950 cohort was slightly more positive and the post 1950 cohort slightly less positive than the aggregate. Of the aggregate cohort, 20% said their experience of adult family life influenced their learning greatly, 50% said “moderately”, and the remaining 30% said only “a little” or “not at all”. The pre 1950 cohort was more influenced, and the post 1950 cohort less influenced, than the aggregate.

On balance, 70% of the aggregate cohort viewed their experience of adult family life as a positive influence and said that it influenced their education and learning either “greatly” or “moderately”. This suggests consistency with the British finding that experience of adult family life is a key indicator of later-life learning.

Summary of Results

At this level of analysis, the frequencies suggest, overall, likely consistency with the British findings in relation to six of the seven determinants of lifelong learning, the only exception being gender. Within the acknowledged constraints of a pilot study of a small, purposefully selected sample of cases, on balance the data suggests *prima facie* support for the British findings. The data also suggests *prima facie* that there may be a characteristic difference between the lifelong learner cohorts born before and after 1950 in Australia. The observable difference between the dispersions of each cohort suggest the possibility that some social factor may have occurred around 1950 or during the 1950s which has in some way affected the propensity of each cohort to lifelong learning.

Summary and Recommendations

Summary of Findings

Whilst there is a large body of literature about lifelong learning *per se*, and a smaller but still sizeable body of literature about lifelong learner attributes, there is a paucity of literature about determinants of lifelong learning. Some literature purports to deal with determinants, but on closer inspection is found to actually deal with attributes, for example Beairsto (2000). The definition of lifelong learning is the single most difficult problem for finding a consensus about lifelong learning *per se* and determinants. Definitions vary and appear to be inspired by various social and political agenda and their accompanying rhetoric, becoming problematic to the subject itself. In turn, the various agenda are in some way and to varying degrees influenced, if not driven, by globalism and its fundamental policy of economic rationalism (Lee & Alter, 2005; Stone, 1992; Watson, 2003).

Globalism has become the prevailing postWar paradigm among Western policy and decision makers. Its effect, globalisation, is now well entrenched in secular and academic thinking and literature. Education now accepts globalisation as an inherent characteristic of contemporary life for which it prepares students (Bryce et al, 2000). However, policy is driven by economic rationalism, the instrument of globalism which essentially arose from the Bretton Woods Agreement (Rajan & Zingales, 2000). This policy rationale places the responsibility for and cost of education on learners – the beneficiaries. Current global and Australian policy promotes lifelong learning as a panacea for some social and economic issues. The International Labour Organisation (2000b) has described the proffering of lifelong learning as a means of achieving increasing economic efficiency, individual prosperity, and social cohesion. These are attractive to Australians and Australian society.

For the purpose of this study, lifelong learning has been defined as all learning over the whole lifespan which is either formal, or informal and involving self-study and/or practice. Lifelong learner attributes include those of a person who is knowledgeable with deep understanding,

complex thinking and creativity, who actively investigates and effectively communicates, is interdependent with their world, and is a reflective and self-directed learner.

Globally, the OECD (2004) promotes lifelong learning for all and is supported by other institutions such as the World Bank (1999). At a national level, Australian federal governments give tacit support to the policy through their membership of the OECD. This is further supported by the commissioning and publication of reports such as Watson's (2003), but stops short of a formal policy document.

Since the late 1980s, when the first financial deregulatory steps were taken in Australia, federal governments have increasingly adopted economic rationalist policies, and education and the workplace have been no exception to the effects. Through education financing, Australian governments seek to influence education content, one indication of which is the adoption by universities and schools of lifelong learning as a graduate attribute. Workplace learning has also felt the impact of policy as responsibility for workers' career management and development, and hence work-related learning, has shifted from employers to workers themselves. Workers are now expected to manage their own careers, and knowledge and skill obsolescence is a fact of work life (Watson, 2003). Workers must now actively participate in and manage their learning in an ever changing world of work and society. Therefore, from a critical perspective it is reasonable to ask whether everyone *is* or *can* be a lifelong learner.

The work of Gorard and Selwyn (2005) in Britain and Watson (2003) in Australia has found that about a quarter to a third of people interviewed do not participate in any form of learning and would not be persuaded to do so. The World Bank (1999) lists "Students ready to learn" (p.47) at the top of its list of factors typical of access in a good education system. Bull (2005) has discussed the mismatch between the composition of society and the tertiary education sector, and its implications for equity. The same case can reasonably be argued in relation to the mismatch between the rhetoric of lifelong learning for all and actual participation. In view of the known nonparticipation level, it is also reasonable to contemplate the effectiveness of an education for all policy approach.

It is not yet clear whether nonparticipants in lifelong learning *cannot* or *will not* participate, or both. Given policy expectations and work and social imperatives for lifelong learning, there are important implications for policy and equity. To expect all to be lifelong learners, it must be known whether all *can* be lifelong learners, in turn requiring knowledge of the determinants of lifelong learning. Gorard and Selwyn (2005) found the determinants of British lifelong learning are

- time of birth
- place of birth
- gender
- family background
- experience of initial schooling
- experience of work life, and
- experience of adult family life.

They also found that the determinants are widely misunderstood. This is corroborated by this study's review of literature, which finds that lifelong learner attributes are often confused with determinants.

Mindful of Osborne's (2002) caution about making international comparisons, this study explored ten purposefully selected cases which appeared to exhibit lifelong learner characteristics. They were selected on the basis that they had been involved in two or more different types of work and had held long-term interests or hobbies which involved self-study or practice. The British determinants were used as the variables to be analysed and frequencies were analysed in conjunction with interviewees' additional comments and in light of the literature review.

The data was found to suggest *prima facie* consistency with six of the seven British determinants of lifelong learning, the exception being gender. The literature review found a paucity of research and literature on determinants of lifelong learning specifically. In both Britain and Australia a significant proportion of the population (approximately a quarter to a third) does not participate in any learning despite economic and social incentives. It appears not to be known whether nonparticipants can be motivated to engage with learning. However, the British research

indicates that propensity to lifelong learning is established early in life and is not significantly influenced again until work and adult family life become influential factors.

Recommendations

This study has found a *prima facie* case that the British findings of lifelong learning determinants may be transferable to the Australian context. The implications are that economic, equity, and education policy may profit from reviewing the lifelong learning for all paradigm. Further research could potentially find whether the universal expectation of lifelong learning is realistically achievable and equitable. If that could be established then individuals, society, and the economy could benefit from identifying how the benefits of the lifelong learning paradigm may be maximised. The stakes are high and deeper insight into the learning motives of lifelong learners has the potential to inform and benefit education and training policy and practice.

References

- Australian Bureau of Statistics. (2002, February 3, 2006). *2001 Census Data : Toowoomba (QLD) (Statistical District)*. Retrieved May 31, 2006, from <http://www.abs.gov.au/ausstats/abs@cpp.nsf/DetailsPage/30642001?OpenDocument&tabname=Details&prodno=3064&issue=2001&num=&view=&#Basic%20Community%20Profile>
- Beairsto, B. (2000). What does it take to be a lifelong learner? In Beairsto, B & Ruohotie, P. (Eds.), *Empowering teachers as lifelong learners: Reconceptualizing, restructuring and reculturing teacher education for the information age*. Tampere: University of Tampere.
- Bîrzéa, C. (2000). *Education for democratic citizenship: a lifelong learning perspective*. Retrieved September 13, 2005, from http://www.coe.int/T/E/Cultural_Co-operation/education/E.D.C/Documents_and_publications/By_subject/Policies/099_education_a_lifelong_2000_21.asp
- Brookfield, S. (2000). Adult cognition as a dimension of lifelong learning. In J. Field, & Leicester, M. (Ed.), *Lifelong Learning: Education Across the Lifespan*. Philadelphia: Falmer Press.
- Bryce, J., Frigo, T., McKenzie, P., & Wither, G. (2000). *The era of lifelong learning: implications for secondary schools*. (Issues paper). Camberwell: Australian Council for Educational Research Ltd.
- Bull, D. (2005, July 6th-8th). *Fee-free preparation for higher education – considering qualitative as well as quantitative outcomes*. Paper presented at the 14th European Access Network (EAN) Annual Conference, University of Vienna, Austria.
- Faris, R. (2004). *Lifelong learning, social capital and place management in learning communities and regions: a Rubic's Cube or a kaleidoscope?* Retrieved April 21, 2006, from http://www.obs-pascal.com/resources/faris_2004.pdf
- Gallagher, M. (2001, July 24). *Lifelong learning: demand and supply issues – some questions for research*. Paper presented at The Business/Higher Education Roundtable Conference on The Critical Importance of Lifelong Learning., Sydney.
- Gorard, S., & Selwyn, N. (2003, September 11-13). *Patterns of participation in lifelong learning: results from the Adults Learning@Home 2002 household survey*. Paper presented at the British Educational Research Association Annual Conference, Edinburgh.
- Gorard, S., & Selwyn, N. (2005). What makes a lifelong learner?. *Teachers College Record*, 107(6), 1193-1216.

- Grace, A. P. (2002, June 16-19). *Intersecting instrumental, social, and cultural education to build and sustain inclusive lifelong-learning communities*. Paper presented at the 2nd International Lifelong Learning Conference 2002, Yeppoon, Qld.
- Hopkins, S., & Maglen, L. (1998). *What has training got to do with business strategy?* Retrieved April 25, 2006, from <http://www.education.monash.edu.au/centres/ceet/docs/conferencepapers/1998confpaperhopkins.pdf>
- International Labour Organisation. (2000) a. *Conclusions on lifelong learning in the twenty-first century: The changing roles of educational personnel*. (Sector Meeting). Geneva: International Labour Organisation.
- International Labour Organisation. (2000)b. *Lifelong learning in the twenty-first century: The changing roles of educational personnel*. (Discussion paper). Geneva: International Labour Organisation.
- Jenkins, A., Vignoles, A., Wolf, A., & Galinda-Rueda, F. (2002). *The determinants and effects of lifelong learning*. London: Centre for the Economics of Education, London School of Economics and Political Science.
- Kalantzis, M. (2003). *Young people, schools and innovation: towards an action plan for the school sector*. (Report No. RTTE 222). Canberra, ACT: Australian Council of Deans of Education.
- Kelly, A. (2004). Design research in education: yes, but is it methodological? [Electronic version]. *Journal of the Learning Sciences*, 13(1), 115-128.
- King, Z. (2004). Career self-management: its nature, causes and consequences. [Electronic version]. *Journal of Vocational Behaviour*, 65(1), 112-133.
- Lansbury, R. D. (2003). *Work, people and globalisation: towards a new social contract for Australia*. Retrieved November 11, 2004, from <http://www.econ.usyd.edu.au/wos/worksite/lansbury4.html>
- Laver, P. (1996). *Lifelong learning – Key issues*. Canberra: National Board of Employment, Education and Training.
- Lee, K. T., & Alter, R. (2005, September 9). *Eighth workshop of the APEC-OECD co-operative initiative on regulatory reform*. Paper presented at The APEC-OECD Symposium on Structural Reform and Capacity Building., Gyeongju, Korea.
- McKenzie, P. (1998). *Lifelong learning as a policy response*. Retrieved April 25, 2006, from <http://www.education.monash.edu.au/centres/ceet/docs/conferencepapers/1998confpapermckenzie.pdf>

- McKenzie, P. (2000, October 30). *Youth pathways to promote lifelong learning*. Paper presented at the Mobilising Resources for Lifelong Learning conference, Melbourne.
- Moran, T. (2000). *Lifelong learning workshop*. Retrieved April 25, 2006, from <http://education.qld.gov.au/publication/production/reports/html/archive/2000-03-09-lifelong.html>
- Murphy, M. (2000). Adult education, lifelong learning and the end of political economy. [Electronic version]. *Studies in the Education of Adults*, 32(2), 166-181.
- National Board for Employment, Education and Training (1994). *Developing lifelong learners through undergraduate education*. (No. 28). Canberra: Australian Government Publishing Service.
- Neuman, W. L. (2000). *Social research methods: qualitative and quantitative approaches*. (Fourth ed.). Needham Heights, MA.: Allyn and Bacon.
- Organisation for Economic Cooperation and Development. (1997). *Labour market policies: new challenges - lifelong learning to maintain employability*. Retrieved June 21, 2006, from http://64.233.167.104/search?q=cache:5B5lNyvzQiMJ:www.oilis.oecd.org/olis/1997doc.nsf/8d00615172fd2a63c125685d005300b5/fa393fc70cee0841c12565310051f4dc/%24FILE/10E75123.DOC+oecd+1996+%22policies+which+affect+education+are+coherent+and+cost-effective%22&hl=en&gl=au&ct=clnk&cd=3&lr=lang_en
- Organisation for Economic Cooperation and Development . (2004). *Lifelong learning*. Retrieved September 20, 2005, from <http://www.oecd.org/dataoecd/17/11/29478789.pdf>
- Osborne, M. (2002, June). *What works?* Paper presented at the 2nd International Conference on Lifelong Learning, Yeppoon, QLD.
- Parker, A. (2003). Identifying predictors of academic persistence in distance education. [Electronic version]. *USDLA Journal*, 17(1).
- Queensland Schools Curriculum Council. (2002). *Overall learning outcomes and lifelong learners*. Retrieved September 20, 2005, from <http://www.qsa.qld.edu.au/yrs1to10/oia/outcomes/notes/lll-pn.pdf>
- Rajan, R. G., & Zingales, L. (2000). *The great reversals: the politics of financial development in the 20th century*. Retrieved July 4, 2006, from <http://www.oecd.org/dataoecd/15/22/1885716.pdf>
- Stone, J. (1992). The future of clear thinking. *Quadrant*, 36(1-2), 56-63.
- Watson, L. (2003). *Lifelong learning in Australia*. (Research report No. 03/13). Canberra, ACT: Department of Education, Science and Training.

Webb, S. (2000, June). *Questions for the adult educator on a virtual odyssey: an analysis of internet and web-based learning*. Paper presented at the 41st Annual Adult Education Research Conference, Vancouver, B.C.

Weiss, N. A. (1989). *Elementary Statistics*. Reading, MA: Addison-Wesley Publishing Company.

Wiersma, W., & Jurs, S.G. (2005). *Research methods in education: an introduction*. (Eighth ed.). Boston, Ma.: Pearson Education, Inc.

World Bank Human Development Network, (1999). *Education sector strategy*. Retrieved September 20, 2005, from http://siteresources.worldbank.org/EDUCATION/Resources/ESSU/education_strategy_1999.pdf

Appendix A

Interview Questionnaire

Research Project - Propensity to Lifelong Learning in Australia

Questionnaire 2006

Coversheet

Robert White
Faculty of Education
University of Southern Queensland

Ph. : 4613 4802
Email : whiterj@tpg.com.au

Interviewee's Name
Address
.....
.....
Phone no.
Email

Interview date / /

Interview timeam/pm

Research Project - Propensity to Lifelong Learning in Australia

Questionnaire 2006

Robert White
Faculty of Education
University of Southern Queensland

Ph. : 4613 4802
Email : whiterj@tpg.com.au

- | | | | |
|----|--------|--------|---|
| 1. | Gender | Male | 1 |
| | | Female | 2 |

- | | | | |
|----|-----------|---------|---|
| 2. | Age range | 21 – 40 | 1 |
| | | 41 – 60 | 2 |
| | | > 60 | 3 |

Formal Education and Training

Full-time education up to the minimum school leaving age

3. What *type* of school were you attending when you reached the minimum school leaving age?

- | | |
|--------------------------------|---|
| State Secondary | 1 |
| Private (fee paying) Secondary | 2 |
| Denominational (Church) | 3 |
| Other | |
| | 4 |

4. Would you describe your attendance as regular?

Yes	1	No	2
-----	---	----	---

Comments.....

5. How would you *describe* your *experience* of formal schooling?

	Very positive	Positive	Undecided	Negative	Very negative
(a) At the time	1	2	3	4	5
(b) On reflection	1	2	3	4	5

Comments.....

6.

	Yes	No	
(a) Did you leave school at <i>minimum</i> leaving age ?	1	2	
(b) If (a) = Yes, had you completed secondary school ? (i.e. Year 12)	1	2	
(c) If (b) = No, did you complete secondary more than 1 yr. later ?	1	2	
(d) If (c) = Yes, how long after leaving ?		yrs.
(e) If (a) = No, did you continue f/t education ?	1	2	
(f) Highest formal secondary qualification/level achieved ?			
Junior/Year 10 = 1	1		
Senior/Year 12 = 2	2		
Other..... = 3	3		

Comments.....

Full-time education more than one year after the minimum school leaving age
(include all education whether or not it resulted in a formal qualification)

7. After the minimum school leaving age, what full-time study did you do and where (institution)?

(a)	Secondary school	TAFE college	University	Commercial organisation	Religious organisation	Other	None
	1	2	3	4	5	6	7
(b) Year started							
(c) Length	...yrs...mths	...yrs...mths	...yrs...mths	...yrs...mths	...yrs...mths	...yrs...mths	
(d) Qualification							
(e) Subject matter							

8. After finishing or exiting this course did you continue with full-time education within one year?

Yes 1 No 2

After full-time continuous education

9. Which of the following best describes what you next did *after leaving full-time education*?

Activity	Self-employed	1
	Employed f/t (>29hrs/wk)	2
	Employed p/t (<30 hrs/wk)	3
	Succession of short-term/temporary jobs/work	4
	Unemployed	5
	Unpaid work (e.g. voluntary, homemaking)	6
	F/t study	7
	P/t study	8
	Other	9

Time period	Year began	Year ended	Activity	Job/work	Supervised people ? – number ?
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Notes re: 'Other 9':

Period

“

“

“

Comments

10. Did you attend any training sessions/courses *relating to your job* during this period?

(Short sessions = < 1 day; Longer sessions = > 1 day)

Yes 1 No 2

Provider:	Educational institution (e.g. school, college, tertiary)	1
	Private (commercial) provider	2
	Internal formal training (off the job)	3
	Internal training (on the job, e.g. apprenticeship, internship)	4
	Other	5

Form of recognition or achievement:

Statement of attainment	1
Employer certificate	2
Employer acknowledgment	3
Adjunct to trade/professional qualification	4
Professional development certificate	5
Other	6

Activity:	Self-employed	1
	Employed f/t (>29hrs/wk)	2
	Employed p/t (<30 hrs/wk)	3
	Succession of short-term/temporary jobs/work	4
	Unemployed	5
	Unpaid work (e.g. voluntary, homemaking)	6
	F/t study	7
	P/t study	8
	Other (e.g. retired, semi-retired)	9

Training session/course	Short = 1 Long = 2	Subject matter	Form of recognition or achievement	Provider	Employer paid for training Yes 1 No 2	What you did between training sessions/courses	Period between training sessions/courses Yr. began - Yr. ended
1							/
2							/
3							/
4							/
5							/
6							/
7							/
8							/
9							/
10							/
11							/
12							/
13							/
14							/
15							/
16							/
17							/
18							/
19							/
20							

Notes for 'Other 7' (e.g. retired, semi-retired) :

Period

.....
.....
.....
.....

Comments

.....
.....
.....

Other formal education or training

11. Have you ever undertaken any other formal education or training course ?

Yes 1 No 2

Types of other formal education or training:

- Government training scheme 1
- Return to education as a mature-age student 2
- Bridging/preparatory course 3
- Evening/adult education class 4
- Summer/winter school 5
- Open learning course 6
- Religious training/study 7
- Employer 8
- Other 9
- 9

- Provider:
- Educational institution (e.g. school, college, tertiary) 1
 - Private (commercial) organisation 2
 - Community organisation 3
 - Religious organisation 4
 - Employer 5
 - Other 6
 - 6

Type	Subject matter	Provider	Highest qualification/award
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Informal learning

- 12.** Other than what you've previously described, have you had or do you now have any *long-term* main interest or hobby *that involves self-study or practice*?

Yes 1 No 2

Type of hobby/interest	Still engaged in hobby/interest Yes = 1 No = 2	Year started/stopped
1		/
2		/
3		/
4		/
5		/
6		/
7		/
8		/
9		/
10		/
11		/
12		/
13		/
14		/
15		/

Comments.....

Family background

It is believed there is a strong connection between a person's educational life and their parental background. Could we now discuss some questions in relation to your parents(or the person/people who brought you up), to develop an understanding of your educational background.

For the purpose of these questions, 'neighbourhood' means 'where this interview is taking place.'

Each item of information applies to each parent/guardian separately.

13.

	Main job, occupation or work	Highest education or formal training qualification achieved	Age when leaving f/t education (yrs.)	Year of birth	Place born	Place now living	Religion of family of origin
Father							
Mother							

Place born and now living:

This neighbourhood	1
This district/local authority area	2
Elsewhere in Queensland	3
Elsewhere in Australia	4
Outside Australia	5

Religion of family background:

None	1
Catholic	2
Anglican	3
Other Protestant	
.....	4
Jewish	5
Islamic	6
Hindu	7
Other	
.....	8

Personal profile

These questions relate to yourself and some of the significant events in your life which may have had an influence on your education and employment opportunities. These may include such events as marriage, moving home etc..

For the purpose of these questions, 'neighbourhood' means 'where this interview is taking place'.

14(a). Do you have, or have ever had, children living with you?

Yes 1 No 2

(b). For each of those children, starting with the eldest, in which year did they join and/or leave your household?

Child no.	Year joined/left
1	/
2	/
3	/
4	/
5	/

15. What do you consider your national identity to be?

Australian	1
Other	
.....	2

Comments.....

16. To which ethnic group do you consider you belong?

White – Australian	1
White – other	
.....	2
Other	
.....	3

Comments.....

17. What is the main language spoken in your home?

English	1
Other	
.....	2

18. What is your current marital status?

Single/separated/widowed	1
Married/living with long-term partner	2

19. In what year were you born?

20. Where were you born?

This neighbourhood	1
This district/local authority area	2
Elsewhere in Queensland	3
Elsewhere in Australia	4
Outside Australia	5

21. Do you have any long-term illness, health problem or disability?

Yes	1	No	2
-----	---	----	---

22. How many addresses have you lived at since leaving your parental home?

1	2	3	4	More than four (code 5)
---	---	---	---	-------------------------

23. Excluding your current address, in which of these areas have you previously lived?

Elsewhere in this neighbourhood	1
Elsewhere in this district/local authority area	2
Elsewhere in Queensland	3
Elsewhere in Australia	4
Outside Australia	5

Reflection on factors that influenced learning/education

24. To what extent do you think that the following has influenced your learning/education over time?

Influencing factor	Positive influence = 1 Negative influence = 2	Extent of influence (1 – 5)				
		1 Greatly	2 Moderately	3 A little	4 Undecided	5 Not at all
Timing of opportunity	1 2					
Your age	1 2					
Where you learnt	1 2					
Your gender	1 2					
Family of origin	1 2					
Adult experience of family life	1 2					
Initial schooling	1 2					
Your work	1 2					

Comments.....

25. On reflection now, how would you describe your experience of...

	Very positive	Positive	Undecided	Negative	Very negative
...formal learning ?	1	2	3	4	5
...informal learning ?	1	2	3	4	5

Comments:

Formal learning.....

Informal learning.....

The End

Questions regarding participation in further research

- (a) Would you be willing to take part in further discussion relating to this research? This may include clarifying the matters discussed today or discussing further issues as the research develops.

Yes 1 No 2

- (b) Would you like to receive a summary of the results of this survey when the research is completed?

Yes 1 No 2

- (c) If so, would you prefer to be contacted by:

Email 1
Phone 2
Post 3

Really The End

Appendix B

Coefficients of Correlation

Table B1

Personal characteristics

		Proportion of post-secondary years involving formal study (f/ t& p/t) %			Proportion of whole life involving a hobby or long-term interest		
		Aggregate	Pre- 1950	Post- 1950	Aggregate	Pre- 1950	Post- 1950
Year of birth	Pearson Correlation	.165	.061	.833	.339	.025	.814
	Sig. (2-tailed)	.649	.977	.080	.338	.969	.094
	N	10	5	5	10	5	5
Place of birth	Pearson Correlation	.456	.061	.059	.015	-.791	.721
	Sig. (2-tailed)	.185	.922	.925	.967	.111	.170
	N	10	5	5	10	5	5
Gender	Pearson Correlation	-.324	-.029	-.875	-.459	-.408	-.667
	Sig. (2-tailed)	.361	.963	.052	.182	.495	.219
	N	10	5	5	10	5	5

Table B2

Influences

		Proportion of post-secondary years involving formal study (f/ t& p/t) %			Proportion of whole life involving a hobby or long-term interest		
		Aggregate	Pre-1950	Post-1950	Aggregate	Pre-1950	Post-1950
Family of origin - extent of influence	Pearson Correlation	-.313	-.480	.236	.600	.600	.913*
	Sig. (2-tailed)	.379	.413	.703	.066	.285	.030
	N	10	5	5	10	5	5
Experience of initial schooling - extent of influence	Pearson Correlation	.293	.460	.074	-.095	-.302	.320
	Sig. (2-tailed)	.411	.436	.906	.795	.622	.599
	N	10	5	5	10	5	5
View of formal schooling at the time	Pearson Correlation	.669*	.628	.833	.012	.000	.408
	Sig. (2-tailed)	.034	.259	.080	.973	1.000	.495
	N	10	5	5	10	5	5
View of formal schooling on reflection	Pearson Correlation	.519	.724	.108	-.074	-.102	.218
	Sig. (2-tailed)	.125	.167	.862	.839	.875	.724
	N	10	5	5	10	5	5
Work - extent of influence	Pearson Correlation	.055	a	.125	-.363	a	-.667
	Sig. (2-tailed)	.881	a	.841	.302	a	.218
	N	10	5	5	10	5	5

Table B2 (cont'd)

Influences

		Proportion of post-secondary years involving formal study (f/ t& p/t) %			Proportion of whole life involving a hobby or long-term interest		
		Aggregate	Pre-1950	Post-1950	Aggregate	Pre-1950	Post-1950
Adult experience of family life - extent of influence	Pearson Correlation	-.257	-.717	.522	.267	.958**	-.361
	Sig. (2-tailed)	.473	.173	.367	.455	.010	.550
	N	10	5	5	10	5	5

* Correlation is significant at the 0.05 level (2-tailed)

**Correlation is significant at the 0.01 level; (2-tailed)

a Cannot compute because one of the variables is constant